

**[2005] [3899] Aortic valve replacement in octogenarians: operative outcome and long-term results**

**P.H. Kolh<sup>1</sup>, A. Kerzmann<sup>2</sup>, J. Jacquart<sup>2</sup>, P. Gerard<sup>3</sup>, R. Limet<sup>2</sup>.** <sup>1</sup>*Liege, Belgium;* <sup>2</sup>*University Hospital of Liege, Cardiothoracic Surgery, Liege, Belgium;* <sup>3</sup>*University of Liège, Department of Biostatistics, Liège, Belgium*

**Objective:** Because octogenarians are increasingly referred for aortic valve replacement (AVR), we assessed factors influencing operative and long-term outcome in those patients.

**Methods:** Records of 220 consecutive octogenarians having AVR between 1992 and 2004 were reviewed, and follow-up obtained (99% complete). Of the group (mean age: 82.8 years; 174 females), 142 patients (65%) were in New York Heart Association (NYHA) class III-IV, 22 (10%) had previous myocardial infarction, and 8 (4%) had percutaneous aortic valvuloplasty. They were 44 urgent procedures (20%), and coronary artery bypass grafting (CABG) was performed in 58 patients (26%).

**Results:** Operative mortality was 13% (9% for AVR, 24% for AVR+CABG). Significant postoperative complications were atrial fibrillation in 48 patients (22%), respiratory insufficiency in 46 (21%), permanent atrio-ventricular bloc in 12 (5%), myocardial infarction in 10 (5%), hemodialysis in 4 (2%) and stroke in 4 (2%). Median hospital and intensive care unit stays were  $17.6 \pm 2.2$  and  $6.9 \pm 3.4$  days, respectively, while 92 patients (42%) stayed in the hospital more than 14 days. Multivariate predictors of hospital death were percutaneous aortic valvuloplasty, NYHA class IV, urgent procedure and associated CABG. Mean follow-up was 58.2 months and actuarial 5-year survival was  $73.2 \pm 6.9\%$ . Preoperative myocardial infarction and urgent procedure were independent predictors of late death. At most recent follow-up, 91% were angina free and 81% in class I-II.

**Conclusion:** AVR in octogenarians can be performed with acceptable mortality, although significant morbidity. These results stress the importance of early operation on elderly patients with aortic valve disease, but associated coronary artery disease is a harbinger of poor operative outcome. Long-term survival and functional recovery are excellent.

**Session Info:** Cardiovascular disease in the elderly

**Citation:** European Heart Journal 2005;Vol.26(Abstract Supplement):676